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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,392	12/13/2005	Mattias Muller	053454	2550
38834 7590 02/23/2010 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER DESAI, ANISH P	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 02/23/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/560,392	Applicant(s) MULLER ET AL.	
	Examiner ANISH DESAI	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed on 01/25/10 after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/25/10 has been entered. Support for amended claims 6 and 18 are found in the specification (e.g. pages 9-10).
2. In view of applicant's amendment, 112-first and second paragraph rejections that are not maintained are withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1- 30 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

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4. With respect to claims 1, 2, and 14, said claims recite “a **first**” full-area or partial metal layer and “a **second** full-area or partial metal layer disposed on this surface relief structure”. Specification as originally filed fails to provide support for the “**first**” full-area or partial metal layer “ and “a **second** full-area or partial metal layer disposed on this surface relief structure”.

5. As to newly added claim 36, said claim requires presence of visible dyes *and* visible pigments. Specification does not provide support for the presence of both visible dyes and visible pigments in a layer as presently recited.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

7. Regarding claims 1, 2, and 14, said claims recite “first full-area” and “second full-area”. It is unclear as to what is meant by “full-area”.

8. Additionally, claims 1, 2, and 14 recite color effect. It is unclear as to what is meant by this recitation. For the purpose of the examination, if a prior art teaches a coating including metal layer (s) as claimed, said coating and the metal layers would intrinsically have coloration or color effect as claimed.

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9. With respect to claims 14-25 and 28, said claims recite "thin sheet material". The term "thin" is a relative term and as such it is unclear as to what constitutes "thin sheet" without setting forth any numerical value of thickness.

10. Claim 26 recites "and the like". The term "like" is indefinite because it is unclear as to what is the scope of the claim. As such the Examiner suggests deletion of "and the like".

11. With respect to claims 29 and 30, said claims depends from claim 1, wherein claim 1 recites that system comprises a data carrier, valuable document and pack. Further, said claim 1 recite that the system also comprises a coating. However, claims 29 and 30 recite that system is for color identification of valuable document, a product and a pack, and the system is a valuable document or pack respectively. As such, claims 29 and 30 are vague because it is not clear how can a system comprise at least one of data carrier, document and pack (claim 1); and be a system for color identification of at least one of a valuable document, a product and a pack (claim 29) and system is a valuable document or pack (claim 30).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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12. Claims 1, 2, 4, 5, 10, 14, 16, 17, 22, and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voerman et al. is relied upon as an equivalent document for convenience).

13. Regarding claims 1, 2, and 14, Voerman teaches authenticity/security identification mark (equated to applicant's system, security element, and thin sheet material) that can be attached to documents and packaging (column 2 lines 53-67) (equated to read on the system comprising at least one of a data carrier, valuable document and pack of claim 1). Further, the identification mark of Voerman as shown in Figure 6 comprises a layer of polyester (column 5 line 6) (equated to substrate of claim 2), a layer 49 containing hologram (equated to a surface relief structure including a hologram) that is between a metal (aluminum) layer 47 and another metalized (e.g. aluminum) layer 50 (column 4 lines 44-45, column 5 lines 9-12 and Figure 6). This disclosure of Voerman meets the claimed structure of a coating having first full-area metal layer, a surface relief structure including a hologram disposed on the metal layer, and a second full-area metal layer disposed on the surface relief structure.

14. As to the claim limitation of coating and metal layer having a coloration or a color effect, the term "color effect" is broad and given that the metal layers of Voerman as disclosed above and applicant's coating are formed of **Al** (see 0023 of US Patent Application Publication of this application), it is clear that the coating and the metal layer

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of Voerman intrinsically have a coloration or color effect as presently claimed. Further, it is submitted that aluminum inherently has a metallic (grey or silvery) color.

15. As to claims 4, 5, 16, and 17, the coating of Voerman as previously disclosed includes metals such as Al. Additionally, with respect to claims 4 and 16, the layer of metal 47 and a layer of varnish 48 (Figure 6) of Voerman are collectively equated to a metal layer. As such, in this interpretation the coating of Voerman which includes metal layer (47, 48), hologram layer 49 and a metal layer 50 (Figure 6) consists of metal as claimed.

16. As to claims 10 and 22, the security element of Voerman is on a paper support layer 42 (Figure 6) and given that applicant's invention uses a paper as carrier substrate (see 0037 of US Patent Application Publication of this application), the paper layer of Voerman meets the claimed carrier substrate, and the aforementioned disclosure of Voerman meets the claim requirement of the security element (or thin sheet material for claim 22) is laminated to at least one carrier substrate.

17. As to claims 26-30, as previously disclosed at column 2 lines 53-67, Voerman teaches that the security identification mark can be applied to packaging and documents (equated to read on valuable document, data carrier and a product).

Claim Rejections - 35 USC § 102 or 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 3 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience).

19. Claims 3 and 15 are directed to product by process limitation. The product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the

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prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

20. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

21. In the instantly claimed subject matter, applicant's coating comprises a first full-area or partial metal layer, a surface relief structure including a hologram disposed on the metal layer, and a second full-area or partial metal layer on the surface relief structure which includes hologram. As previously disclosed in Figure 6 of Voerman, the coating of Voerman also includes a metal layer 47/a layer containing hologram/a metal layer 50. There appears to be no structure and/or performance difference between the coatings of applicant as claimed and Voerman.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 6, 7, 12, 18, 19, 24, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience) as applied to claims 2 and 14 above, and further in view of Kaule et al. (US 6,284,396 B1).

23. Voerman is silent as to teaching claims 6, 12, 18, 24, and 36.

24. However, Kaule discloses a multilayer transfer foil that contains optically variable structure such as hologram (abstract and column 4 lines 29-40). The invention of Kaule has utility in the area of providing security to documents, bank notes, identity cards etc. (column 1 lines 9-10). The multilayer transfer foil of Kaule can also include layers such as surfaces with effect pigments (equated to a further layer containing pigments and at least one of the visible pigments) (column 4 lines 47-48). Additionally, at column 4 lines 12-15, Kaule discloses hot melt adhesive.

25. It is noted that the inventions of Voerman and Kaule are in the same field of endeavor, namely security elements for documents etc. Further, Voerman at column 5 lines 14-15 and lines 16-17 discloses that several of the layers of security element of the invention can be dispensed with other layers and numerous variants of the invention are possible within the scope of the invention.

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26. With respect to claims 6, 18, and 36 it would have been obvious to provide a further layer containing pigments including that of presently claimed and a further layer containing at least visible pigments as taught by Kaule in the invention of Voerman, since such pigments provide optically recognizable or optically variable properties for further security (column 4 lines 49-51).

27. As to claims 12 and 24, it would have been obvious to provide hot melt adhesive layer as presently claimed and as taught by Kaule in the invention of Voerman, since it has been held that selection of a known material based on its suitability for its intended use establishes a *prima facie* case of obviousness.

28.

29. As to claims 7 and 19, Voerman teaches a magnetic layer at column 5 lines 7-8.

30. Claims 8, 9, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience) as applied to claims 2 and 14 above, and further in view of Carrell (US 3,628,271).

31. Voerman is silent as to teaching claims 8, 9, 20, and 21.

32. However, Carrell discloses container caps having varnish outer coating (abstract). Further, at column 2 lines 20-25, Carrell discloses of applying a pigmented varnish onto the printing to provide abrasion and corrosion resistance for the finished product.

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33. It is noted that Voerman's identification mark is applied to the substrates such as documents and packaging for providing security (column 2 lines 65-67). The pigmented varnish of Carrell provides abrasion and corrosion resistance (column 2 lines 20-25).

Thus, it would have been obvious to provide a security element of Voerman with varnish such as that of taught by Carrell, motivated by the desire to protect the security element from abrasion and corrosion.

34. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience) as applied to claims 10 and 22 above, and further in view of Jotcham et al. (US 6,085,903).

35. Voerman is silent as to teaching of claims 11 and 23.

36. However, Jotcham discloses a counterfeit resistance security package (abstract and column 2 lines 25-30). Additionally, at column 2 lines 56-57, Jotcham discloses a lamination adhesive that can include dye or colorant.

37. Voerman and Jotcham are in the same field of endeavor, namely in the security packaging area. The laminate of Jotcham uses lamination adhesive that includes pigments. It is noted that the security element of Voerman is laminated to the paper layer 42 (carrier substrate) via adhesive 43 (see Figure 6).

38. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a lamination adhesive which is pigmented as taught by

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Jotcham, since it has been held that selection of a known material based on its suitability for its intended use establishes a *prima facie* case of obviousness.

39. Claims 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience) in view of Kaule et al. (US 6,284,396 B1) as applied to claims 12 and 24 above, and further in view of Berger et al. (US 6,165,592).

40. Voerman is silent as to teaching claims 13 and 25.

41. However, Berger discloses a document that bears an optical safety mark, wherein the optical safety mark is arranged in a sandwich structure and applied to the document by means of an adhesive layer (abstract). Further, the adhesive layer is doped with at least one luminescent substance (abstract) such as luminescent pigments (column 6 lines 50-55).

42. Given that Voerman discloses an adhesive (see Figures 5 and 6 of Voerman and column 5 lines 1-2 and lines 5-6). Further, inventions of Voerman and Berger are in the same field of endeavor, namely security elements for documents etc. and Berger discloses adhesive comprising pigments (abstract). As such, it would have been obvious to provide adhesive layer that is pigmented as taught by Berger, because such an adhesive affords the advantages in the case of efforts to manipulate the optical security attribute, for example efforts to remove it or release it, there always will remain

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part of the adhesive layer and thus doping material bonded to the document (see column 3 lines 5-10 of Berger).

43. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voerman et al. (WO 99/455513-US Patent 6,609,728 B1 to Voreman et al. is relied upon as an equivalent document for convenience) in view of Kaule et al. (US 6,284,396 B1) as applied to claim 18 above, and further in view of Vermeullen et al. (US 6,210,777 B1).

44. As previously noted, Voerman as modified by Kaule already discloses a further layer containing effect pigments (see column 4 lines 47-48 of Kaule). Voerman as modified by Kaule is silent as to teaching visible dyes.

45. However, Vermeullen discloses a security document (abstract). Further at column 7 lines 65-66 Vermeullen discloses presence of dye in the security document. Given that there is no mention in Vermeullen that said dye is invisible dye, it is clear that the dye of Vermeullen is visible dye.

46. Thus, it would have been obvious to use further layer containing visible dyes, since it has been held that selection of a known material based on its suitability for its intended use establishes a *prima facie* case of obviousness.

Response to Arguments

47. Applicant's arguments filed on 01/25/10 have been fully considered.

48. As to applicant's arguments against Curiel (US 5,913,543), it is submitted that said reference was previously withdrawn from the prior art rejections (see section 4 on page 2 of previous Office action mailed on 10/01/09). As such, applicant's arguments are moot.

Conclusion

49. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH DESAI whose telephone number is (571)272-6467. The examiner can normally be reached on Monday-Friday, 9:00AM-5:30PM.

50. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

51. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. D./

Examiner, Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794